

October 24, 2016

VIA ELECTRONIC FILING (ECFS)

Marlene H. Dortch, Esq.  
Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

RE: **EX PARTE PRESENTATION**  
*Transition from TTY to Real-Time Text Technology*  
CG Docket No. 16-145

*Petition for Rulemaking to Update the Commission's Rules for Access to Support the Transition from TTY to Real-Time Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology*  
GN Docket No. 15-178

Dear Ms. Dortch:

On October 20, 2016, Jeff Knighton of Hamilton Relay, Inc. ("Hamilton") and the undersigned counsel on behalf of Hamilton, met with Karen Peltz Strauss and Robert Aldrich of the Consumer and Governmental Affairs Bureau, Suzanne Singleton and Michael Scott of the Disabilities Rights Office, and David Furth, Tim May, and David Siehl of the Public Safety and Homeland Security Bureau. Dixie Ziegler of Hamilton participated by telephone.

During the meeting, the participants discussed the attached presentation regarding various aspects of the Commission's proposed transition from traditional TTY services for the deaf and the hard of hearing to Real-Time Text ("RTT") technology. Hamilton reiterated its position that relay providers should be included in the RTT ecosystem, with wireless carriers (and eventually, wireline carriers) connecting in RTT to relay providers. No RTT to TTY gateway functionality should be required when connecting to relay providers. Rather, both parties should be required to communicate in RTT. Hamilton also offered to act as the common gateway for protocol conversion between RTT and TTY during the backward compatibility period.

This filing is made in accordance with Section 1.1206(b)(1) of the Commission's rules,

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47 C.F.R. § 1.1206(b)(1). In the event that there are any questions concerning this matter, please contact the undersigned.

Respectfully submitted,

WILKINSON BARKER KNAUER, LLP

/s/ David A. O'Connor

Counsel for Hamilton Relay, Inc.

Enclosure  
cc (via e-mail): Participants

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# Hamilton Relay FCC Presentation October 20, 2016



# Hamilton Relay's Proposal in Review

- Hamilton Relay has asked to be included in the RTT ecosystem to allow for RTT to RTT connections between wireless carriers and relay providers.
- Hamilton Relay has also offered to fulfill non-emergency RTT-TTY gateway functions for wireless carriers.
- Using relay as the common gateway for non-emergency calls allows for the optional use of a CA.
  - Available to manage RTT-TTY interworking issues if needed
  - Uses “Call Release” if not needed
  - TRS fund applies ONLY when a CA is needed at the TRS MARS rate
- Wireless carriers support 911 RTT-TTY interworking directly or via a Text Control Center.
- **TRS is never involved when an RTT device directly calls another RTT device.**



## Follow-up from last Meeting

- Describe the potential call types involving RTT and how they will flow through Relay.
- Describe the cost impacts to the Relay Fund.
- Assumptions used:
  - TTY users who switch to RTT will not dramatically change their calling habits.
  - RTT will likely replace TTY usage, but not significantly impact other forms of peer-to-peer communications (Video, SMS, Email, Social Media, etc.).

## TTY Transition to RTT Call Types

### Old Call Type    New Call type

TTY to Voice    → TTY to Voice/RTT

TTY to Voice    → RTT to Voice

TTY to Voice    → RTT to Voice/RTT

TTY to TTY    → TTY to RTT

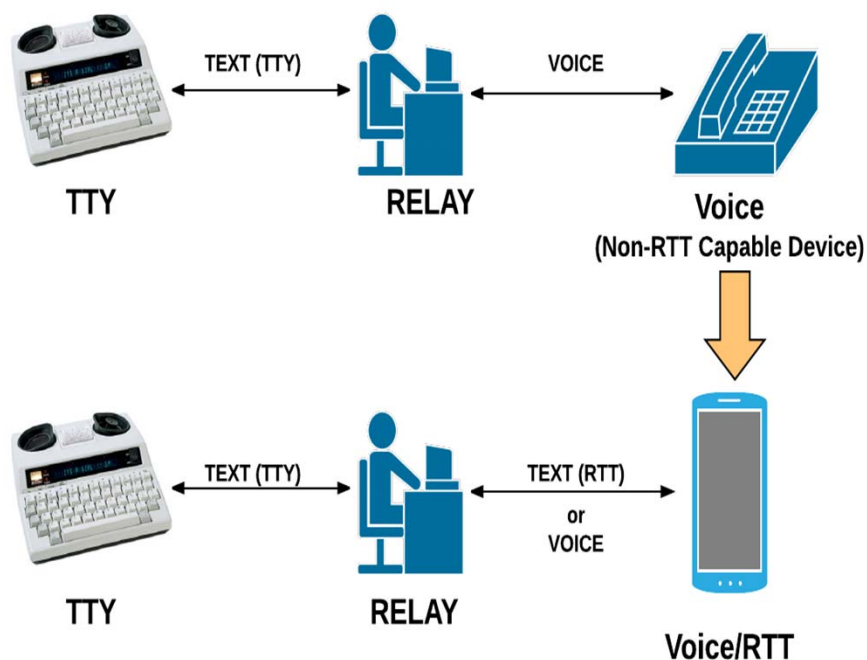
TTY to TTY    → RTT to RTT

TTY to RTT    → RTT to RTT

Interim Call Type

Interim Call Type

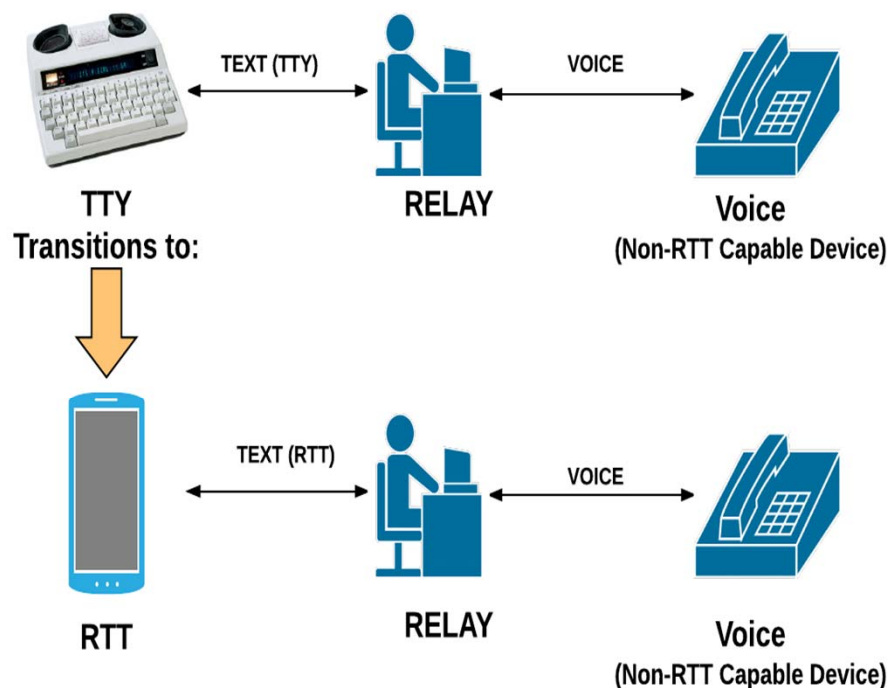
# TTY to Voice → TTY to Voice/RTT



Impact on TRS Fund: Negligible

Voice user transitions to an RTT capable device. TRS is involved, but instead of Text to Voice, it does RTT to TTY interworking with a CA likely involved. (Interim Scenario as TTY will transition to RTT device.)

# TTY to Voice → RTT to Voice



**Impact on TRS Fund: Negligible**

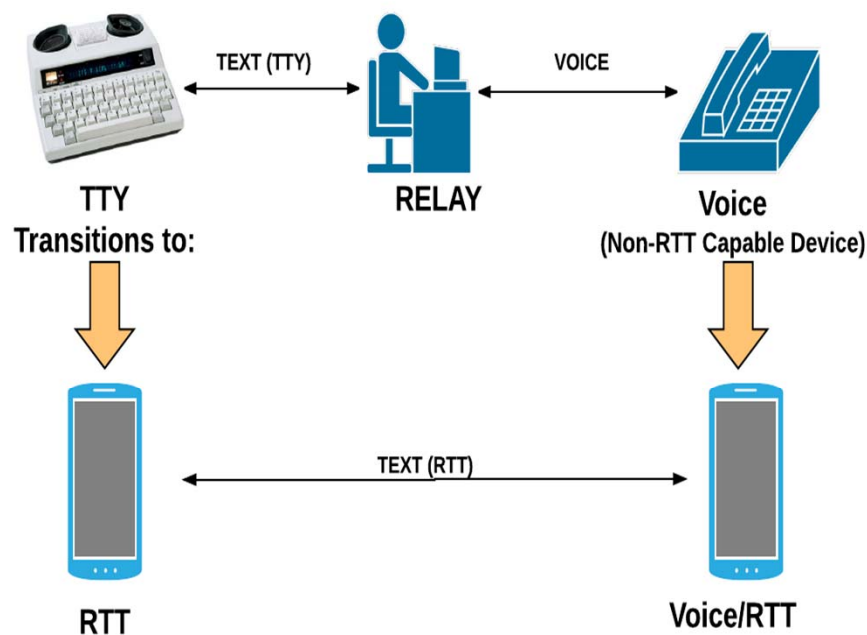
TTY user transitions to an RTT capable device. Relay is still required because the call is with a Voice user with a non-RTT Capable Device.



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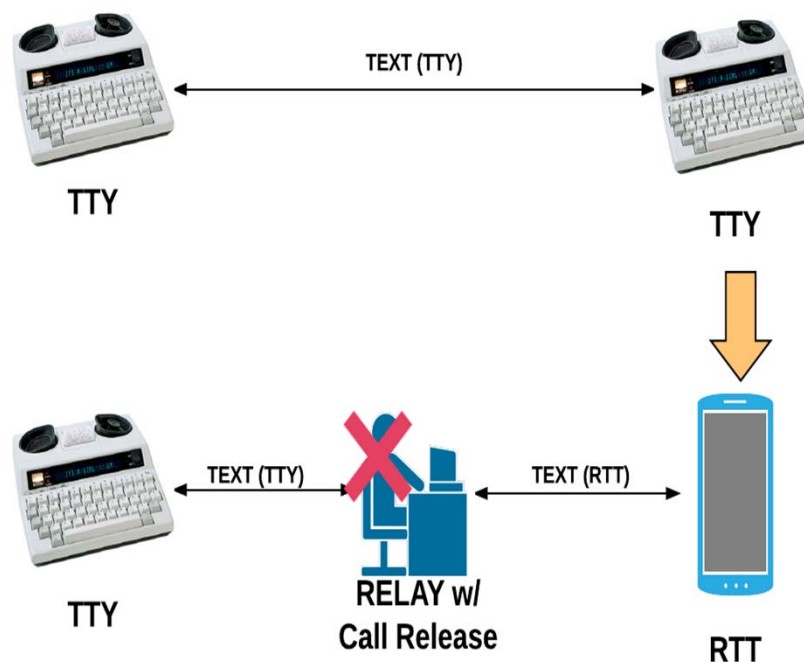
# TTY to Voice → RTT to Voice/RTT



Impact on TRS Fund: Decrease

TTY user and Voice user both transition to an RTT capable device. Relay is no longer used.

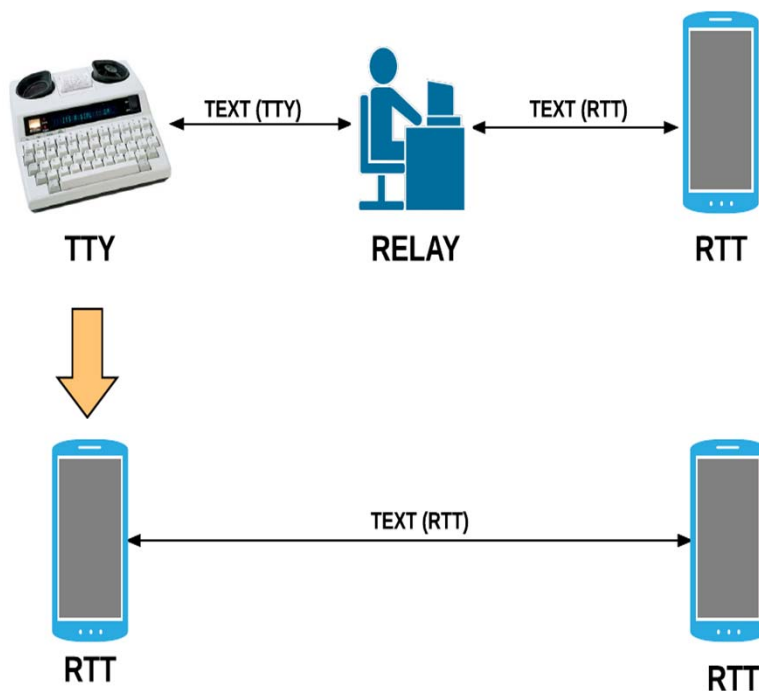
# TTY to TTY → TTY to RTT



**Impact on TRS Fund: Negligible**

One TTY user transitions to an RTT capable device. Relay is not required for TTY-TTY call but is required for TTY to RTT call. CA drops off call or is never on call. (Interim Scenario as TTY will transition to RTT device.)

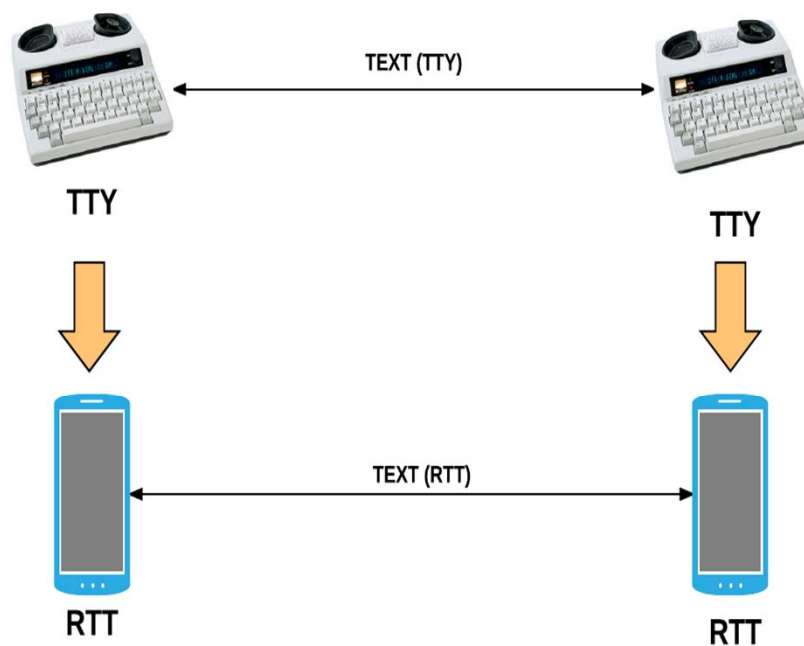
# TTY to RTT → RTT to RTT



Impact on TRS Fund: Decrease

TTY User transitions to an RTT device. Since both sides have RTT capable devices, Relay is not needed.

# TTY to TTY → RTT to RTT



Impact on TRS Fund: None

Both TTY users transition to an RTT capable device. Relay is not involved.



## Summary of TRS Fund impact analysis

- Overall Relay minutes are not projected to increase
- Most call types have a negligible difference on TRS minutes
- Relay minutes decrease when TTY users adopt RTT and “interim” call-types go away

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## What Hamilton Relay Has Observed in Conversations with others

- No opposition thus far to Relay being in the RTT ecosystem.
- No opposition to use of SIP and RFC 4103.
- Default On/Off and use of “transcoder resources” is not resolved. Standards bodies are discussing.
- Indication that transcoder port scaling could be problematic for wireless carriers if they build their own RTT-TTY gateways.
- No one has opposed outright Hamilton’s position of Relay acting as a common gateway for non-emergency RTT-TTY interworking. Others have suggested Relay in this proceeding.

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## What Hamilton Relay Has Observed in Conversations with others

- 911 calling should be as direct as possible. Some parties have offered solutions that parallel Hamilton Relay's solution for non-emergency calling, i.e. use of a Text Control Center.
- Conversations with stakeholders have begun regarding RTT dialing, including using 711 as the dialing mechanism to indicate when RTT-TTY is needed.
- Uncertainty regarding RTT availability in 3G and 2G networks.
- Jurisdiction and Rate issues still need to be addressed.

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# Questions and Further Follow-up